

- 2 -

Amendments to Claims

1. **(Currently Amended)** A fuel cell power plant adapted to store energy which is removed from the associated fuel cell stack during transition from being not operating to operating, and vice versa, comprising:

a controller interconnected with said fuel cell stack and responsive to
5 signals received by said controller to cause said fuel cell stack to start up and to
cause said fuel cell stack to shut down;

an energy storage system associated with said fuel cell power plant, said energy storage system responsive to electrical output provided thereto to store corresponding energy; and

10 ~~a controller interconnected with said fuel cell stack and responsive to~~
~~signals received by said controller to cause said fuel cell stack to start up and to~~
~~cause said fuel cell stack to shut down; and~~

storage control means operable by said controller, during a transition selected from (a) startup of said fuel cell power plant or (b) shutdown of said fuel
15 cell power plant, to extract, in the form of electrical output, energy generated by said fuel cell stack, said electrical output being provided to said energy storage device, thereby limiting the maximum average voltage in the fuel cells of said fuel cell stack during said transition.

2. **(Currently Amended)** A power plant according to claim 1 wherein:

said storage control means comprises an inductor in series with a unilaterally conducting device extending from one electric output of said fuel cell stack to one input of said energy storage system and an electronic switch
5 connected from the juncture of said inductor with said unilaterally conducting device to both a second electric output terminal of said fuel cell stack and a second terminal of said energy storage system; and

said electronic switch is ~~cyclically~~ gated on and off by a signal from said controller.

- 3 -

- 10 3. **(Currently Amended)** A power plant according to claim 1 wherein:
said storage control means comprises an inductor in series with a
unilaterally conducting device extending from one electric output of said fuel cell
stack to one input of said energy storage system and an electronic switch
connected from the juncture of said inductor with said unilaterally conducting
15 device to both a second electric output terminal of said fuel cell stack and a second
terminal of said energy storage system; and
said electronic switch is cyclically gated on and off by a signal from said
controller.

4. **(Original)** A power plant according to claim 1 wherein:
said energy storage system comprises an electric battery.

5. **(Original)** A power plant according to claim 4 wherein:
said electric battery is disposed on a vehicle powered by said power plant.

6. **(Original)** A power plant according to claim 1 wherein:
said energy storage system comprises a capacitor.

Respectfully submitted,



M. P. Williams
Attorney of Record
Voice: 860-649-0305
Fax: 860-649-1385

210 Main Street
Manchester, CT 06040

Date: August 5, 2004